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10/526,676

09/26/2005

Vincent Lorentz

LOM-0049

3247

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7590

03/17/2008

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EXAMINER

EDWARDS, NEWTON O

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,676

**Applicant(s)**

LORENTZ, VINCENT

**Examiner**

N Edwards

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 20, 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date 3/4/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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Applicant urges that 1) he elected group I drawn to the article and the single disclosed species fibers Claim 1, aromatic polyamide (Claim 2) and polyethersulphone (claim 3).

The Primary Examiner notes, Applicant has failed to directly respond to the election of species to claim 1, line 5 (for the thermoplastic polymer for a second time). The Office has reviewed your responses ( 1/7/08 and 1/30/08) and interpreted a constructive election to claim 1, lines 5 as polysulphones. Note, if applicant should cancels the forgoing constructive elected item form claim 1, it will result in a nonresponsive action and timely abandonment of your case.

Applicant request 2) claims 1, 17, and 18 be examined together since claim 1 is directed to and article comprising a fiber and /or fibril comprising a blend of two different polymers.

The answer is no. According to the Lack of Unity of record date 12/5/07 your product claims can be divide since you claims lack a STF (special technical feature). If you said claims 1,17,18 are not patentably distinct, and a fiber and a fibrils mean the same, then you would have a different answer.

Applicant concludes 3), if claim 1 is allowable then it would necessarily follow that the fiber ( claim 17 with linear density ) and fibril (Claim 18) would also be allowable.

Arguendo, if the above is true then if claim 1 is rejected as elected then claim 17, and 18 would not be allowable. For the above, to be true a fiber and fibril would have to mean the same thing. Is that what applicant is saying ? Group I will be examined in accordance with you election of species and the Lack of Unity of record is deemed proper for reason of record and hereby made FINAL.

Regarding the IDS dated 3/4/05, the lined reference EP 648812 B1 was not considered since applicant only submitted the cover page and pages 38-48, **while pages 1- 37 were not submitted.**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12,13,14,15,16, 20 and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ekiner (EP 648812 A2 ) alone or optionally taken with Yano (US 5,164,460).

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For the record, the invention defined in a product by process claim is a **PRODUCT** AND not A PROCESS. In re Bridgeford, 357 F.2d 679, Ti is the patentability of the product claimed and **NOT** of the recited process steps which must be established. In re Brown, 459 F.2d 531. In re Wertheim, 541 F. 2d 257. Thus , the product invention defined by product by process claims 1,4,6-12,14,15,16 claims is an articles comprising fibers (includes non-woven) formed from a blend of polyamide-imide and polysulphone (polyether sulphone).

Ekiner teaches a gas separation membrane hollow fibers (which embrace non-woven or web) made from a blend of polysulphones (such as polyether sulphone) and polyamide-imide (which includes aromatic and non-aromatic polyamide-imide) in any ratio amount to achieve the desired properties such as 50 % by weight of each component in the blend. See page 8 lines 45-55, page 9 lines 9 to 18, example 2 page 13-14 table 1 and 2, for example. Ekiner further teaches that one skill in the art known that a membrane (gas separation membrane) can be used as thin film, composite structure (composite material such electrical insulation), and hollow fibers.

Yano is cited to show that it is well known in that art that composite materials ( as disclosed in Ekiner) made from a blend of polysulphone and polyamide-imide can be used as electrical insulation due to their inherent heat stability, mechanical strengths and chemical resistance.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ekiner taken with Yano (US 5,164,460).

Ekiner is applied for the reason given above which is hereby incorporated by reference.

Ekiner teaches all of the claimed invention except the composite structure (membrane) used as electrical insulation.

Yano teaches it is well known in the art of composite materials to use the polyamide – imide blend with polysulphone as electrical insulation due to the polyimide inherent heat stability, mechanical strength, and chemical resistance. See col.2 lines 17-30 and col.3 lines 47-50, for example.

Thus, it would have been obvious to one of ordinary skill in the art to use the blend of polysulfone and polyamide-imide blend as electrical insulation, as taught by Ekiner, in order to render the composite structure (membrane), as taught by Yano, heat stable, chemical resistance, and mechanical strong.

In the Alternative, it would have been obvious to one of skill in the are to use Ekiner composite structure (membrane) as electrical insulation since Yano teaches the

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composite material blend of polysulphone and polyamide-imide (embrace aromatic and non-aromatic) yield predictable results of heat stability, mechanical strength , and chemical resistance.

The cited patent disclose the state of the prior art.

Any inquiry concerning this communication should be directed to Primary Examiner Edwards at telephone number 571-272-1521.

/N Edwards/  
Primary Examiner  
Art Unit 1794